

Appl. No. 9/471,857
Amdt. dated June. 13, 2005
Reply to Office Action of Jan. 12, 2005

NC 29176

REMARKS/ARGUMENTS

In the specification, the sentence of page 3 lines 14-17 has been amended to be consistent with the Prior Art notation on Fig. 3 and Fig. 4.

Claims 1,7,11 and 13 are rejected under 102(e) as being anticipated by Kwon et al. (U.S. Patent 6,151,328) in the office action of January 12, 2005.

The patent of Kwon is drawn to the power control requirements in forward and reverse link CDMA systems employing antenna diversity, col. 1 lines 9-10. Interpretation of power control bits (PCB's) for transmitter and receiver portions are used to assign individual antenna power and signal reverse link power, respectively, and presented in col. 2 lines 3-15. Fig. 4 describes base station power control, col. 5 lines 12-16. Fig. 5 describes a receiver for multicarrier CDMA having multipliers 111-113, each fed by a single

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one tone local oscillator, referred to as a subcarrier, col. 5
lines 35-40.

The rejection of claims 1, 7, 11 and 13 depends upon Fig. 2 of Kwon, but applicants note Fig. 2 is a transmitter and clearly outside the scope of presently claimed receiver. In addition, the use of several local oscillators is denoted as prior art in applicants specification on page 5 line 18 through page 6 line 4. Kwon teaches a multicarrier receiver in Fig. 5 requiring several local oscillators and redundant hardware to downconvert multiple signals producing a wide dispersion of signals each assigned to a finger for power control determination. Clearly, the "each of said plurality of information channel signals are generated from a plurality of frequencies..." is not met.

Claims 5, 6, 15 and 16 are rejected under 103(a) as being obvious over Kwon et al. (U.S. Patent 6,151,328) as applied to claims 1 and 13, and further in view of Suominen (U.S. Patent 6,247,068) in the office action of January 12, 2005.

The patent of Suominen teaches an RF tuner and method for operation in analog portion of a receiver, col. 1 lines 21-28. A local oscillator can be tuned to cover a wider step size of frequencies,

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col. 3 lines 4-11. The local oscillator generates only a single F_{LO} value, but this value can be adjusted, col. 4 lines 34-41 and col. 6 lines 23-27. The single F_{LO} is obtainable over a wide range of frequencies, col. 7 lines 52-67, but no discussion or suggestion of multiple F_{LO} 's.

As applied to claims 5,6,15 and 16, Kwon does not teach the application of multiple frequencies to downconvert information channel signals. The addition of Suominen to Kwon does not remedy this deficiency, as the teaching of Suominen presents an adjustable local oscillator signal over a wide range of frequencies, but still only a single F_{LO} value. Claimed "plurality of oscillator frequencies..." is neither present or suggested by the references taken individually or in combination.

Claim 12 is rejected under 103(a) as being obvious over Kwon et al. (U.S. Patent 6,151,328) as applied to claim 1, and further in view of Oberhammer et al. (U.S. Patent 6,115,363) in the office action of January 12, 2005.

The patent of Oberhammer teaches a receiver having a local oscillator to supply a single F_{LO} before and after a band-pass filter, col. 2 lines 22-25. The reliance on Fig. 3b to teach

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filtering before downconverting is misplaced. The description in Oberhammer in col. 6 lines 48-57 clearly presents an initial downconversion at mixer 51 with F_{LO} from local oscillator 36, followed by filter 60 and final downconversion at mixer 64. Consequently, the alleged teaching is not supported by the disclosure of Oberhammer.

Applicants note with appreciation the objection of claims 8-10 as allowable if rewritten to include all the limitations of the base claim and all intervening claims, and allowability of claim 20.

Support for new claim 21 is found in the specification on page 7 lines 25-27. Support for new claim 23 is found in the specification on page 12 lines 25-30. Support for new claim 25 is found in claim 1. Support for new dependent claims is found in claim 16.

A two month extension of time appears in the appendix, as a \$450 charge should be made to deposit account 50-0270. Note the two month date fell on Sunday, June 12, 2005, and this response is filed on the next business day, June 13, 2005.

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Accordingly, the objections have been addressed in the present response. Present claims 1,5-13,15,16 and 20-26 are believed to be in allowable form having overcome all existing objection set forth within the office action of January 12, 2005. Therefore, the applicant respectfully requests allowance of all the claims and issuance of a notice of allowance.

Respectfully submitted,



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